Weston Solutions, Inc.
3900 Dallas Parkway, Suite 175
Plano, TX 75093
Attn: Ms. Michelle Brown

Passive Soil Gas Survey – Analytical Report
Date: December 14, 2012

Beacon Project No. 2563

Project Reference:	Norphlet Chemical, Norphlet, AR
Samplers Installed:	August 8, 2012
Samplers Retrieved:	August 16, 2012
Samples Received:	August 17, 2012
Analyses Completed:	August 17, 2012
Laboratory Data Issued:	August 23, 2012

EPA Method 8260C (Modified)
All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in nanograms (ng) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

Reporting limits
The contract required quantification limit (CRQL) is 25 nanograms (ng) for individual compounds and 5,000 ng for Total Petroleum Hydrocarbons (TPH). **Table 1** provides survey results in nanograms per sampler by sample-point number and compound name. The CRQLs represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

Calibration Verification
The continuing calibration verification (CCV) values for the calibration check compounds were all within ±20% of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

Method Blanks/Trip Blanks
Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blank analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analysis of the trip blank (labeled Trip-1 in **Table 1**) reported none of the targeted compounds.

676323

Passive Soil-Gas Survey Notes

When sample locations are covered with or near the edge of an artificial surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

BEACON's passive soil-gas samplers are prepared with two sets of adsorbent cartridges for subsequent duplicate or confirmatory sample analysis. At WESTON's request, duplicate analysis was performed for one (1) field sample; designated with "DUP" following the sample number. When comparing quantitative results, a duplicate correspondence should be considered when the relative percent difference (RPD) between the two samples is less than or equal to 100%. For the purpose of calculating correspondences, all non-detections should be assigned, as a baseline value, the CRQL for the specific contaminant. No compounds were reported on the base sample or field sample duplicate.

Project Details

Samplers were deployed on August 8, 2012, and were retrieved on August 16, 2012. **Attachment 2** describes the field procedures used. Individual deployment and retrieval times will be found in the Field Deployment Report (**Attachment 3**).

Ten (10) field samples, one (1) field sample duplicate, and one (1) trip blank were received by BEACON on August 17, 2012. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C (Modified), as described in **Attachment 4**. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on August 17, 2012. Following a laboratory review, results were provided to WESTON on August 23, 2012. The Chain-of-Custody form, which was shipped with the samples for this survey, is supplied as **Attachment 5**.

Sample locations are shown on **Figure 1**. The following table lists frequency of detections based on the number of field samples analyzed, the reporting limit, and the maximum value for each mapped compound. The table also includes the transformation and interpolation method for the compound distribution maps provided.

Figure No.	**2**	**3**
Compound	Toluene	TPH C_{10}-C_{15}
Frequency	1	1
Reporting Limit (nanograms)	25	5,000
Max Value (nanograms)	27	5,565
Transformation Method	None	None
Interpolation Method	Kriging	Kriging

Attachments:

-1- Applying Results From Passive Soil-Gas Surveys
-2- Field Procedures
-3- Field Deployment Report
-4- Laboratory Procedures
-5- Chain-of-Custody Form

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. BEACON ENVIRONMENTAL SERVICES IS ACCREDITED TO ISO 17025:2005, AND THE WORK PERFORMED WAS IN ACCORDANCE WITH ISO 17025 REQUIREMENTS. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:

Steven C. Thornley
Steven C. Thornley
Laboratory Director

Patti J. Riggs
Patti J. Riggs
Quality Manager

Table 1

Beacon Environmental Services, Inc.
323 Williams Street
Bel Air, MD 21014 USA

Analysis by EPA Method 8260C (Modified)

Client Sample ID:	mb120817a	Trip-1	PSG-01	PSG-02	PSG-03	PSG-04
Project Number:		2563	2563	2563	2563	2563
Lab File ID:	A12081703	A12081705	A12081706	A12081707	A12081708	A12081709
Received Date:		8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012
Analysis Date:	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012
Analysis Time:	11:21	12:19	12:41	13:04	13:27	13:50
Matrix:			Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<25	<25	<25	<25	<25	<25
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	<25
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	**27**	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	<25	<25	<25
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

Results in nanograms (ng). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
323 Williams Street
Bel Air, MD 21014 USA

Analysis by EPA Method 8260C (Modified)

Client Sample ID:	PSG-05	PSG-05 DUP	PSG-06	PSG-07	PSG-08	PSG-09
Project Number:	2563	2563	2563	2563	2563	2563
Lab File ID:	A12081710	A12081711	A12081712	A12081713	A12081714	A12081715
Received Date:	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012
Analysis Date:	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012	8/17/2012
Analysis Time:	14:12	14:35	14:58	15:21	15:43	16:06
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<25	<25	<25	<25	<25	<25
Trichlorofluoromethane (Freon 11)	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Methyl-t-butyl ether	<25	<25	<25	<25	<25	<25
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Chloroform	<25	<25	<25	<25	<25	<25
1,2-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1,1-Trichloroethane	<25	<25	<25	<25	<25	<25
Carbon Tetrachloride	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	<25
1,4-Dioxane	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	<25	<25	<25
1,1,1,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
Chlorobenzene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
p & m-Xylene	<25	<25	<25	<25	<25	<25
1,1,2,2-Tetrachloroethane	<25	<25	<25	<25	<25	<25
o-Xylene	<25	<25	<25	<25	<25	<25
1,2,3-Trichloropropane	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2,4-Trichlorobenzene	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25
2-Methylnaphthalene	<25	<25	<25	<25	<25	<25
TPH C_5-C_9	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
TPH C_{10}-C_{15}	<5,000	<5,000	<5,000	<5,000	**5,565**	<5,000

Results in nanograms (ng). B = Detected in method blank.

Table 1

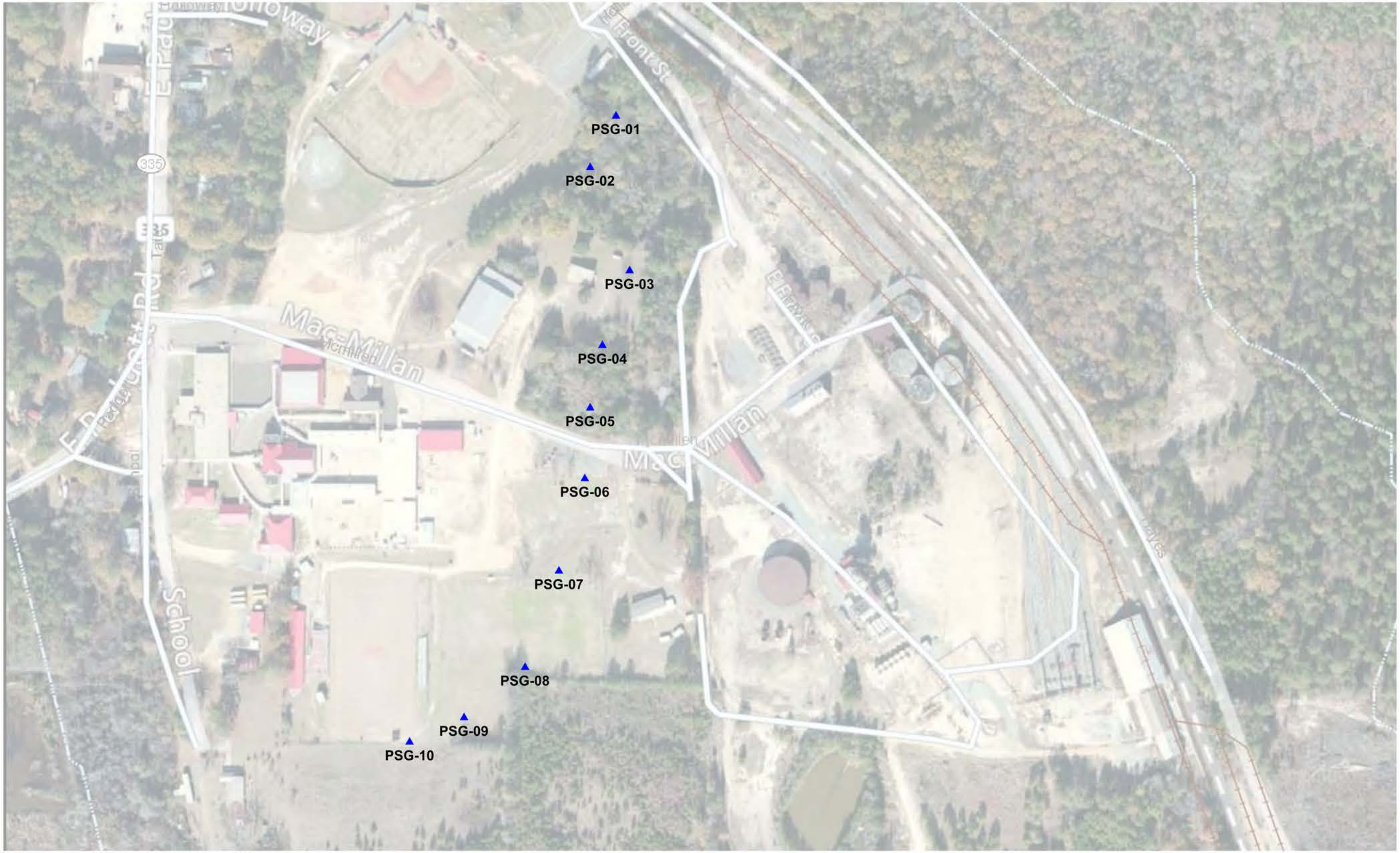
Beacon Environmental Services, Inc.
323 Williams Street
Bel Air, MD 21014 USA

Analysis by EPA Method 8260C (Modified)

Client Sample ID:	PSG-10
Project Number:	2563
Lab File ID:	A12081716
Received Date:	8/17/2012
Analysis Date:	8/17/2012
Analysis Time:	16:29
Matrix:	Soil Gas
Units:	ng

COMPOUNDS	
Vinyl Chloride	<25
Trichlorofluoromethane (Freon 11)	<25
1,1-Dichloroethene	<25
1,1,2-Trichlorotrifluoroethane (Fr.113)	<25
trans-1,2-Dichloroethene	<25
Methyl-t-butyl ether	<25
1,1-Dichloroethane	<25
cis-1,2-Dichloroethene	<25
Chloroform	<25
1,2-Dichloroethane	<25
1,1,1-Trichloroethane	<25
Carbon Tetrachloride	<25
Benzene	<25
Trichloroethene	<25
1,4-Dioxane	<25
1,1,2-Trichloroethane	<25
Toluene	<25
1,2-Dibromoethane (EDB)	<25
Tetrachloroethene	<25
1,1,1,2-Tetrachloroethane	<25
Chlorobenzene	<25
Ethylbenzene	<25
p & m-Xylene	<25
1,1,2,2-Tetrachloroethane	<25
o-Xylene	<25
1,2,3-Trichloropropane	<25
Isopropylbenzene	<25
1,3,5-Trimethylbenzene	<25
1,2,4-Trimethylbenzene	<25
1,3-Dichlorobenzene	<25
1,4-Dichlorobenzene	<25
1,2-Dichlorobenzene	<25
1,2,4-Trichlorobenzene	<25
Naphthalene	<25
1,2,3-Trichlorobenzene	<25
2-Methylnaphthalene	<25
TPH C_5-C_9	<5,000
TPH C_{10}-C_{15}	<5,000

Results in nanograms (ng). B = Detected in method blank.



LEGEND

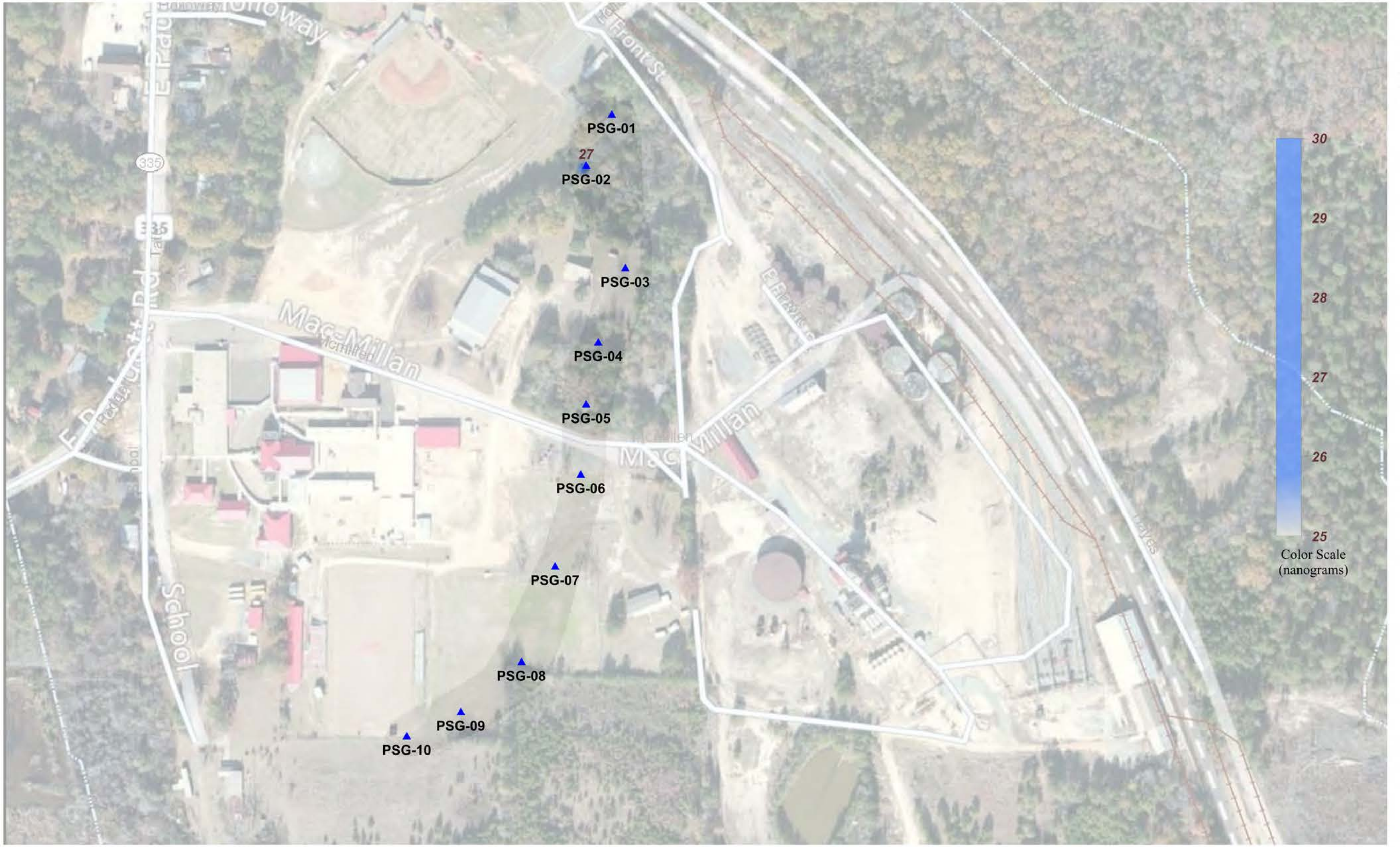
▲ PSG-08 PASSIVE SOIL-GAS SAMPLE LOCATION

BEACON ENVIRONMENTAL SERVICES, INC.
323 Williams Street, Bel Air, MD, 21014, USA 1-410-838-8780

Beacon Project No. 2563, December 2012

Figure 1
Passive Soil-Gas Survey Sample Locations

Norphlet Chemical
Norphlet, AR



LEGEND

1,000 NANOGRAMS/SAMPLER

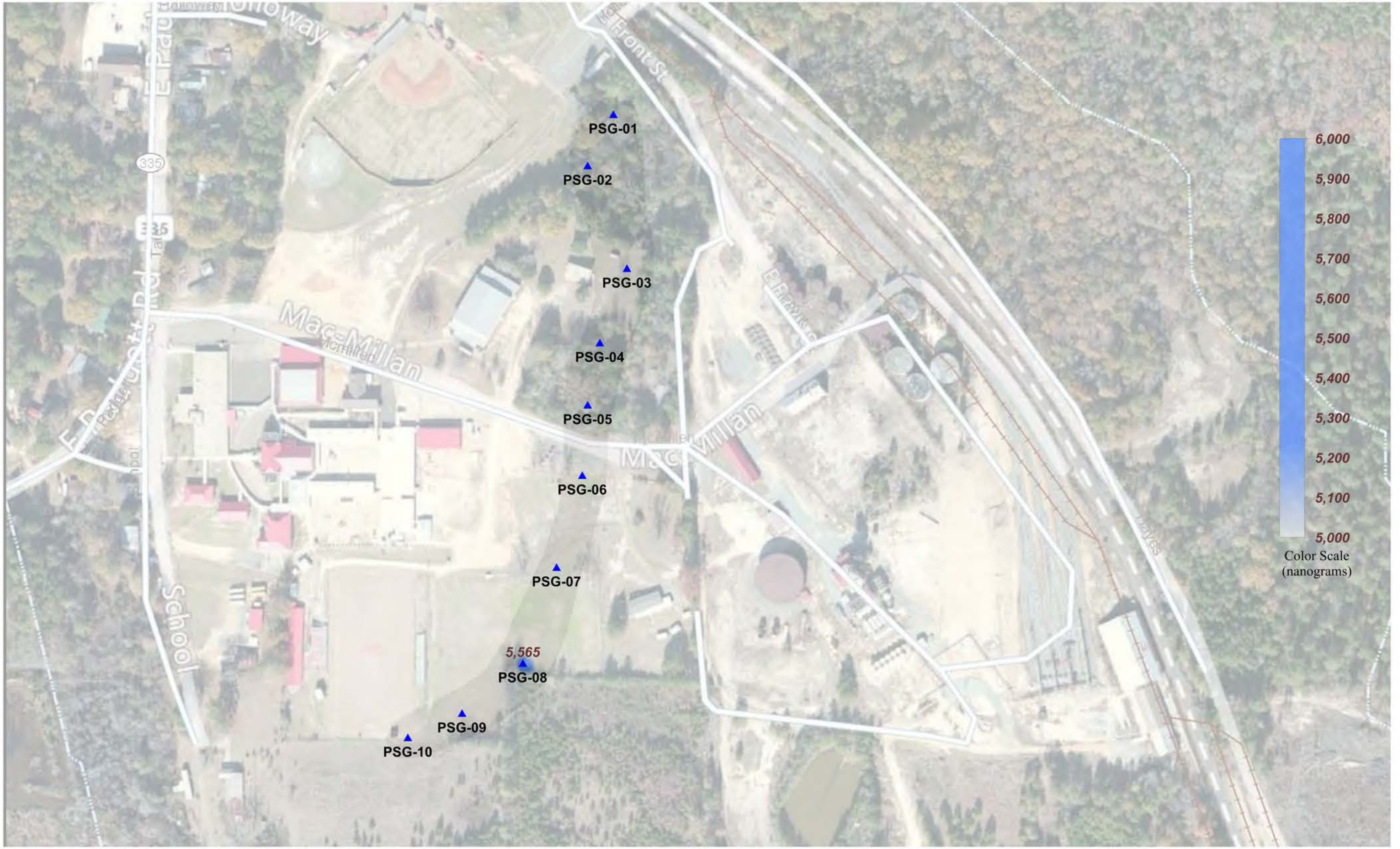
PSG-08 PASSIVE SOIL-GAS SAMPLE LOCATION

BEACON ENVIRONMENTAL SERVICES, INC.
323 Williams Street, Bel Air, MD, 21014, USA 1-410-838-8780

Beacon Project No. 2563, December 2012

Figure 2
Passive Soil-Gas Survey
Toluene

Norphlet Chemical
Norphlet, AR



LEGEND

1,000 NANOGRAMS/SAMPLER

PSG-08 PASSIVE SOIL-GAS SAMPLE LOCATION

BEACON ENVIRONMENTAL SERVICES, INC.

323 Williams Street, Bel Air, MD, 21014, USA 1-410-838-8780

Beacon Project No. 2563, December 2012

Figure 3
Passive Soil-Gas Survey
TPH C10-C15

Norphlet Chemical
Norphlet, AR

Attachments

Attachment 1

APPLYING RESULTS FROM PASSIVE SOIL-GAS SURVEYS

The utility of soil-gas surveys is directly proportional to their accuracy in reflecting and representing changes in the subsurface concentrations of source compounds. Passive soil-gas survey results are the mass collected from the vapor-phase emanating from the source(s). The vapor-phase is merely a fractional trace of the source(s) and, as a matter of convenience, the units used in reporting detection values from passive soil-gas surveys are smaller than those employed for source-compound concentrations.

Passive soil gas data are reported in mass of compounds identified per sample location (e.g., nanograms (ng) or micrograms (µg) per sampler). Results from a passive soil gas survey typically are then used to guide where follow-on intrusive samples should be collected to obtain corresponding concentrations of the contaminants in soil, soil gas, and/or groundwater, as well as eliminate those areas where intrusive samples are not required. It is not practical to report passive soil gas data as concentration because the sampler's uptake rates of the compounds are often greater than the replenishment rates of the compounds around the sampler, which results in low bias measurements, and the replenishment rates will be dependent on several factors that include, at a minimum, soil gas concentrations, soil porosity and permeability, and soil moisture level.

Whatever the relative concentrations of source and associated soil gas, best results are realized when the ratio of soil-gas measurements to actual subsurface concentrations remains as close to constant as the real world permits. It is the reliability and consistency of this ratio, not the particular units of mass (*e.g.*, nanograms) that determine usefulness. Thus, BEACON emphasizes the necessity of conducting — at minimum — follow-on intrusive sampling in areas that show relatively high soil-gas measurements to obtain corresponding concentrations of soil and groundwater contaminants. These correspondent values furnish the basis for approximating a relationship. For extrapolating passive soil gas results to vapor intrusion evaluations, we recommend a minimum of three passive soil gas locations be converted to a shallow vapor well then sampled using an active soil gas method. Once a relationship is established, it can be used in conjunction with the remaining soil-gas measurements to estimate subsurface contaminant concentrations across the survey field. (See www.beacon-usa.com/passivesoilgas.html, Publication 1: *Mass to Concentration Tie-In for PSG Surveys* and Publication 4: *Groundwater and PSG Correlation*.) It is important to keep in mind, however, that specific conditions at individual sample points, including soil porosity and permeability, depth to contamination, and perched ground water, can have an impact on soil-gas measurements at those locations.

When passive soil-gas surveys are utilized as described above, the data provide information that can yield substantial savings in drilling costs and in time. They furnish, among other things, a checklist of compounds expected at each survey location and help to determine how and where drilling budgets can most effectively be spent. Passive soil-gas surveys can also be used as a remediation or general site monitoring tool that can be implemented on a quarterly, semi-annual or annual basis.

Attachment 2

FIELD PROCEDURES FOR
PASSIVE SOIL-GAS SURVEYS

The following field procedures are routinely used during a BEACON Passive Soil-Gas Survey. Modifications can be and are incorporated from time to time in response to individual project requirements. In all instances, BEACON adheres to EPA-approved Quality Assurance and Quality Control practices.

A. Field personnel carry a BESURE Sample Collection Kit™ and support equipment to the site and deploy the passive samplers in a prearranged survey pattern. A passive sampler consists of a borosilicate glass vial containing hydrophobic adsorbent cartridges with a length of wire attached to the vial for retrieval. Although samplers require only one person for emplacement and retrieval, the specific number of field personnel required depends upon the scope and schedule of the project. Each Sampler emplacement generally takes less than two minutes.

B. At each survey point a field technician clears vegetation as needed and, using a hammer drill with a 1″- to 1½″-diameter bit, creates a hole 12 to 14 inches deep. [Note: For locations covered with asphalt, concrete, or gravel surfacing, the field technician drills a 1″- to 1½″-diameter hole through the surfacing to the soils beneath]. The technician then, using a hammer drill with a ½″ diameter bit, creates a hole three-feet deep. The hole is then sleeved with a 1″-diameter metal sleeve.

C. The technician then removes the solid plastic cap from a sampler and replaces it with a Sampling Cap (a plastic cap with a hole covered by screen meshing). The technician inserts the sampler, with the Sampling Cap end facing down, into the hole (**see attached figure**). The sampler is then covered with an aluminum foil plug and soils for uncapped locations or, for capped locations, an aluminum foil plug and a concrete patch. The sampler's location, time and date of emplacement, and other relevant information are recorded on the Field Deployment Form.

D. One or more trip blanks are included as part of the quality-control procedures.

E. Once all the samplers have been deployed, field personnel schedule sampler recovery and depart, taking all other equipment and materials with them.

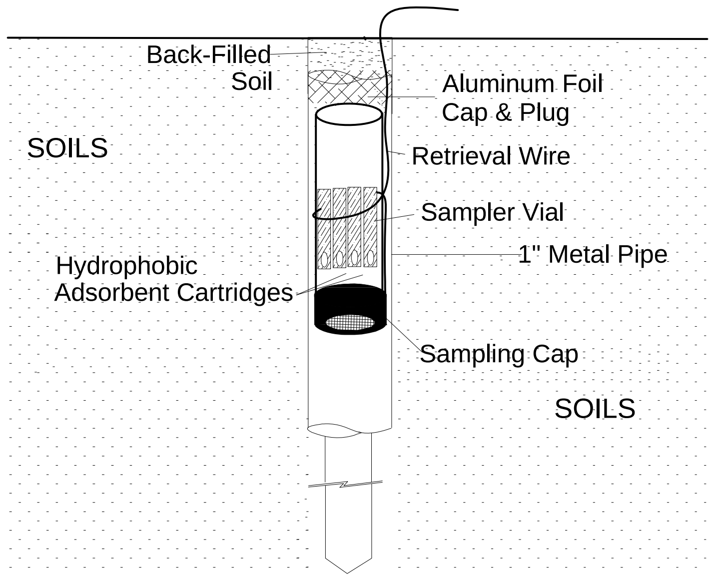
F. Field personnel retrieve the samplers at the end of the exposure period. At each location, a field technician withdraws the sampler from its hole, removes the retrieval wire, and wipes the outside of the vial clean using gauze cloth; following removal of the Sampling Cap, the threads of the vial are also cleaned. A solid plastic cap is screwed onto the vial and the sample location number is written on the label. The technician then records sample-point location, date, time, etc. on the Field Deployment Form.

G. Sampling holes are refilled with soil, sand, or other suitable material. If samplers have been installed through asphalt or concrete, the hole is filled to grade with a plug of cold patch or cement.

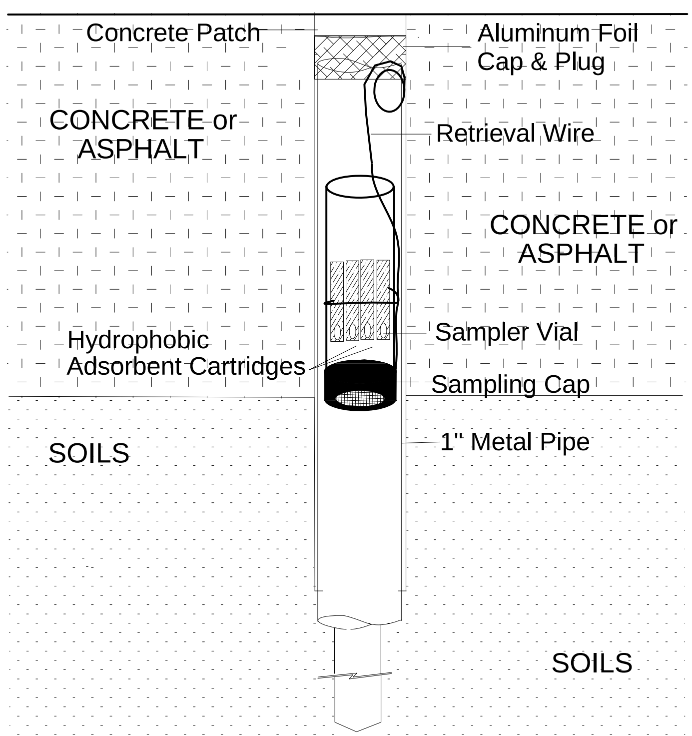
H. Following retrieval, field personnel ship or transport the passive samplers to BEACON's laboratory.

BEACON'S PASSIVE SOIL-GAS SAMPLER

DEPLOYMENT THROUGH SOILS



DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



Attachment 3

Field Deployment Report

PASSIVE SOIL-GAS SURVEY
FIELD DEPLOYMENT REPORT

Project Information	
Beacon Project No.:	2563
Site Name:	Norphlet Chemical
Site Location:	Norphlet, AR

BEACON ENVIRONMENTAL SERVICES, INC.
323 Williams Street, Suite D, Bel Air, MD 21014 (800) 878-5510

Client Information	
Company Name:	Weston Solutions, Inc.
Office Location:	Plano, TX
Samples Collected By:	m. Willis

FIELD SAMPLE ID	Date Emplaced 8/8/12 Time Emplaced	Date Retrieved 8/10/12 Time Retrieved	Sampling Hole Depth (inches)	FIELD NOTES (*e.g.*, asphalt/concrete/gravel, description of sample location, PID/FID readings)
PSG-06	1250	0948	36	Grass cover sampling hole
PSG-04	1331	1008	36	Grass cover sampling hole
PSG-05	1345	1000	36	grass cover in wooded area
PSG-03	1424	1015	36	grass cover in open area
PSG-02	1440	1025	36	grass cover in open area
PSG-01	1500	1030	34	grass cover in wooded area
PSG-07	1521	1042	36	grass cover in football field area
PSG-08	1718	1123	36	grass cover near perimeter of practice field
PSG-09	1726	1051	36	grass cover in practice fied
PSG-10	1740	1057	36	grass cover in practice field

Attachment 4

LABORATORY PROCEDURES
FOR PASSIVE SOIL-GAS SAMPLES

Following are laboratory procedures used with BEACON Passive Soil-Gas Surveys, a screening technology for expedited site investigation. After exposure, adsorbent cartridges from the passive samplers are analyzed using U.S. EPA Method 8260C as a guidance document, a capillary gas chromatographic/mass spectrometric method, modified to accommodate high temperature thermal desorption of the adsorbent cartridges and to meet the objecitves of reporting semi-quantitative data. This procedure is summarized as follows:

A. The adsorbent cartridges are loaded with internal standards and surrogates prior to loading the autosampler with the cartridges. The loaded cartridges are purged in a helium flow. Then the cartridges are thermally desorbed in a helium flow onto a focusing trap. Any analytes in the helium stream are adsorbed onto a focusing trap.

B. Following trap focusing, the trap is thermally desorbed onto a Rxi-624Sil MS 20m, 0.18 mm ID, 1.00 micron filament thickness capillary column.

C. The GC/MS is scanned between 35 and 270 Atomic Mass Units (AMU) at 3.12 scans per second.

D. BFB tuning criteria and the initial five-point calibration procedures are those stated in method SW846-8260C. System performance and calibration check criteria are met prior to analysis of samples. A laboratory method blank is analyzed after the daily standard to determine that the system is contaminant-free.

E. The instrumentation used for these analyses includes:

- Agilent 6890-5973a Gas Chromatograph/Mass Spectrometer;
- Markes Unity thermal desorber;
- Markes UltrA autosampler; and
- Markes Mass Flow Controller Modules

Attachment 5

Chain-of-Custody Form

CHAIN-OF-CUSTODY
PASSIVE SOIL-GAS SAMPLES

Project Information	
Beacon Project No.:	2563
Site Name:	Norphlet Chemical
Site Location:	Norphlet, AR
Analytical Method:	EPA Method 8260C
Target Compounds:	Beacon Project Number 2563 Target Compound List

BEACON ENVIRONMENTAL SERVICES, INC.
323 Williams Street, Suite D, Bel Air, MD 21014 (800) 878-5510

Client Information	
Company Name:	Weston Solutions, Inc.
Office Location:	Plano, TX
Samples Submitted By:	Michelle Brown
Contact Phone No.:	9729772644

Field Sample ID	Comments (only necessary if problem or discrepancy) Notes	Date	Time	Initial
PSG-06	Site recieved ~0.25 inches of rain on 6/15/2012.	8/16/12	0948	mw
PSG-04	No issues when collecting samples.	8/16/12	1008	mw
PSG-05		8/16/12	1000	mw
PSG-05-D		8/16/12	1000	mw
PSG-03		8/16/12	1015	mw
PSG-02		8/16/12	1025	mw
PSG-01		8/16/12	1030	mw
PSG-07		8/16/12	1042	mw
PSG-08		8/16/12	1123	mw
PSG-09		8/16/12	1051	mw
PSG-10		8/16/12	1057	mw
2563 Trip-1		8/16/12	N/A	mw

Shipment of Field Kit to Site — Custody Seal # 17350207 **Intact?** Y N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Kenny Ifeacho	08-01-2012 / 1700 Hours	FedEx	Meagan Willis 8 mo.	8/7/2012 1600

Shipment of Field Kit to Laboratory — Custody Seal # 17350208 **Intact?** Y N

Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Meagan Willis	8/16/2012 1400	FedEx	Steven Thornley	8/17/12 / 1000